

RHINANISUS CHISOSENSIS, A NEW SPECIES
OF COSSONINE WEEVIL IN A GENUS NEW
TO THE UNITED STATES
(COLEOPTERA: CURCULIONIDAE)

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ABSTRACT

The genus *Rhinaninus*, previously known from New Zealand, South and Central America, and the West Indies, is recorded for the first time in the U.S. A tiny new species was reared from the dead leaves of *Agave Havardiana* from Big Bend National Park, Texas.

The genus *Rhinaninus*, originally described by Broun (1883) from New Zealand, is now known also from South and Central America and the West Indies. The previous 9 New World species are all tropical. None were found north of Guatemala, while the present species is from the desert mountains of Big Bend National Park.

This small new species was taken breeding in the leaves of newly dead *Agave Havardiana* Trel. Larvae, pupae, and adults were collected from simple cave type galleries within the dead leaves, and they were reared within the leaves over nearly a 2 year period, which may indicate use of the same leaves for several generations over more than one year. Also specimens were collected in the field in newly dead leaves and in dead plants of the previous year.

Rhinaninus would key to couplet 3 in Kissinger's key (1964) to the genera of Cossoninae which may be modified as follows:

- | | |
|--|-------------------|
| 3. Head not constricted dorsally behind the eyes, eyes located on head .. | 5 |
| Head constricted and globular behind eyes, eyes located on head or apparently on base of rostrum | 3a |
| 3a. Eyes apparently located on base of rostrum, mature color black | 4 |
| Eyes located on head, mature color reddish brown | <i>Rhinaninus</i> |

Rhinaninus Broun 1883:489

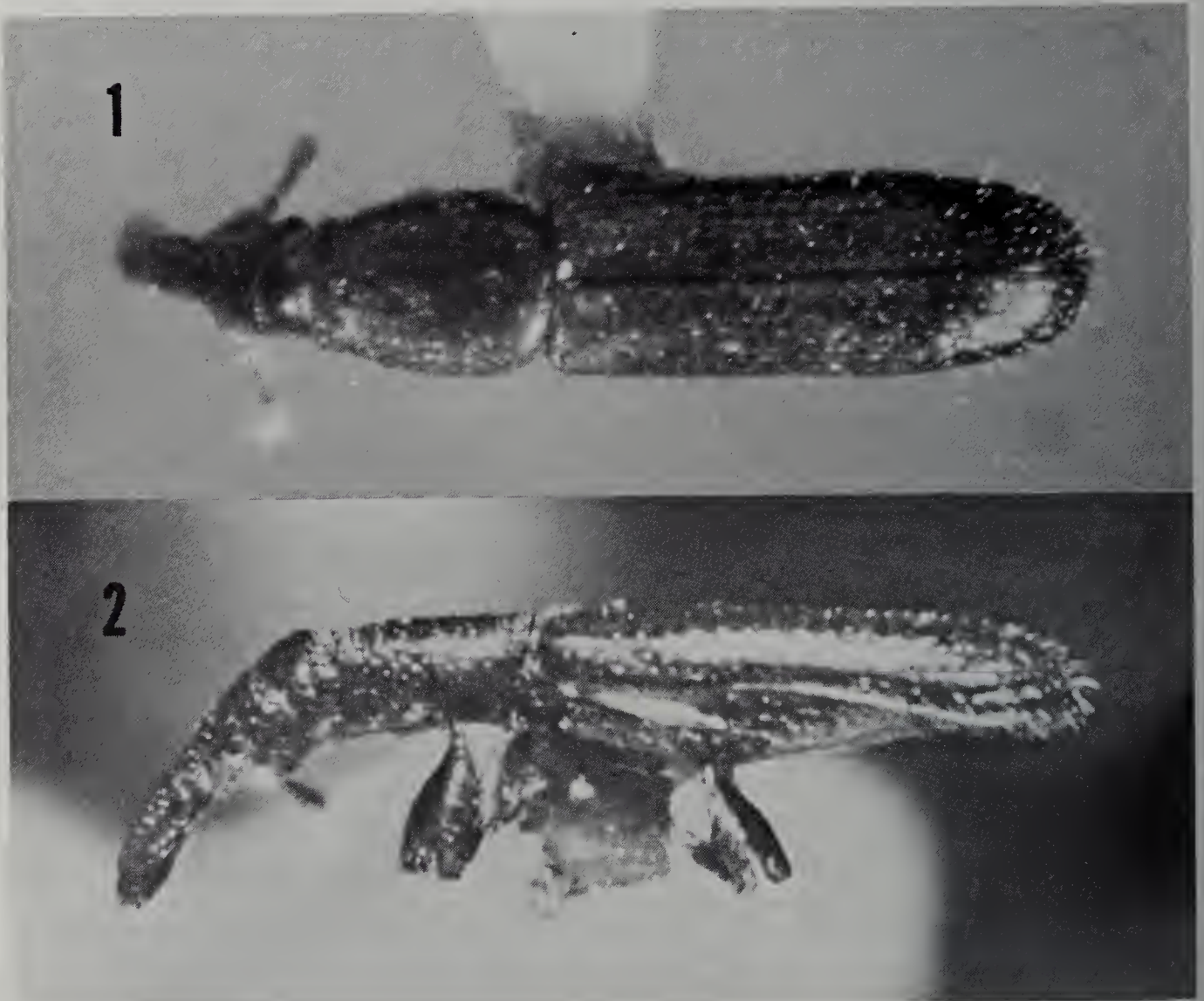
Small, elongate narrow, distinctly flattened; with distinct fine setae.

Rostrum longer than head, apical two-thirds suddenly wider than basal one-third. Scrobes lateral, directed toward lower margin of eye. *Head* constricted behind eyes, smooth and globular, eyes located on head. *Antennae* with 5-segmented funicle; scape reaching middle of eye. *Prothorax* distinctly longer than broad, strongly constricted near apex, flattened, distinctly pubescent. *Scutellum* large, triangular. *Elytra* elongate, flattened, pubescent; striae strongly punctate. *Tibiae* strongly uncinata.

Rhinaninus chisosensis O'Brien, NEW SPECIES

Small, elongate narrow, strongly depressed; strongly punctured, with dense fine setae; color reddish brown.

HOLOTYPE MALE: *Rostrum* continuous with frons; narrow, ca. two-thirds width of head, ca. 1.5 times as long as head; basal one-third strongly, coarsely, densely punctured; narrower than apical two-thirds, with moderately fine, dense, suberect, golden setae; apical two-thirds with median impunctate area, lateral areas coarsely, moderately, sparsely punctured with sparse, similar setae; broadest at apex and antennal insertion. Scrobes lateral, open behind. *Head* with apical area coarsely, densely punctured with dense, erect, golden setae; suddenly constricted, with base globular, glabrous, and scarcely punctate. Eyes moderately small, oval, coarsely faceted, moderately convex. *Antennae* with sparse, fine, suberect setae; with straight, short, stout scape, reaching just beyond middle of eyes; with 5-segmented funicle, 1st segment largest, 2nd half as wide and slightly shorter, segments 3, 4, and 5 much broader than long, progressively larger, club elongate oval, with dense, elongate, fine setae. *Prothorax* longer than broad, sides from base to apical one-third slightly rounded, then constricted and tubulate; coarsely, deeply, moderately densely punctured; with moderately dense suberect golden setae; median area distinctly impressed; median area of apex to constriction smooth and glabrous. Fully winged. *Scutellum* large, triangular, and glabrous. *Elytra* ca. 2.5 times as long as wide, sides subparallel, humeri subrectangular, apex broadly rounded; strial punctures large, elongate oval, deep, close together, separated by less than 0.5 their diameter; intervals flat, indistinctly alutaceous, with small coarse punctures, less than one-third diameter of strial



Figs. 1 and 2. *Rhinanus chisosensis* O'Brien, sp. nov.; 1) dorsal view; 2) lateral view.

punctures; with moderately dense, suberect golden setae. *Venter* clothed moderately with suberect, fine, golden setae. Front coxae distinctly separated, by ca. one-third diameter of coxae; prosternum twice as long in front of coxae as behind; 1st abdominal segment slightly longer than 2nd, 3rd and 4th together much shorter than 2nd, subequal to 5th; 1st suture strongly emarginate medially, 2nd and 3rd straight; 1st and 2nd segments narrowly slightly concave at middle, 5th segment flat. *Legs* with stout, unarmed femora; tibiae broadened at apex, strongly uncinata. Tarsi with 3rd segment broadly bilobed, ventrally densely pubescent; 4th segment elongate, twice as long as 3rd.

Length: 1.8 mm; including head and rostrum 2.4 mm.

ALLOTYPE FEMALE: 1st abdominal suture not visible in median three-fifths; 1st segment flat, not concave; 5th segment distinctly convex. Length: 1.8 mm; including head and rostrum, 2.5 mm.

Holotype and allotype: Texas, Big Bend National Park, Green Gulch [Chisos Mountains], 5300 feet, 26-III-1970, L. & C. W. O'Brien, in leaves dead *Agave Havardiana*. [USNM]

Paratypes: same data, (6)[CWOB], (4)[USNM]; same data except date, 18-IV-1970 (70)[CWOB], (50)[USNM] (20)[FSCA]; same data except date 3-VI-1970 (10)[BBNP], (20)[BMNH], (10)[CASC], (10)[CNCI], (100)[CWOB], (10)[ELSC], (20)[FMNH], (10)[TAMU], (40)[TTUC], (11)[USNM]; Big Bend National Park, Chisos Mountains, Maple Canyon, Elevation 5000 feet, 27-IV-1952, H. S. Dybas, leg., (10)[FMNH], (2) [CWOB]. According to park rangers, Maple Canyon is now called Green Gulch so the specimens are all from the same locality. COLLECTION ABBREVIATIONS: [CWOB] Charles W. O'Brien, [USNM] U.S. National Museum, [BBNP] Big Bend National Park, [BMNH] British Museum of Natural History, [CASC] California Academy of Sciences, [CNCI] Canadian National Collection, [ELSC] E. L. Sleeper, [FMNH] Field Museum of Natural History (Chicago), [TAMU] Texas A & M University, [TTUC] Texas Tech University, [FSCA] Florida State Collection of Arthropods (Gainesville).

This species is not closely related to any North American *Cossoninae* and can be readily identified through its 5-segmented funicle, depressed elongate form, and suddenly constricted head behind the eyes. Its reddish brown color and distinct pubescence are also diagnostic.

LITERATURE CITED

- BROUN, T. 1883. Manual of New Zealand Coleoptera. New Zealand J. Sci. 1:487-499.
 KISSINGER, D. G. 1964. Curculionidae of America North of Mexico, a key to the genera. Taxonomic Publ., S. Lancaster, Mass. v + 143 p.



ECOLOGICAL NOTES ON *BRADYCELLUS SEMIPUBESCENS* LINDROTH (COLEOPTERA: CARABIDAE)

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In Quebec, *Bradycellus semipubescens* Lindroth occurs in deciduous woodland swamps near water, in somewhat shaded localities under bushes of *Acer*, *Alnus*, *Salix*, and *Rubus* on very moist soil, often mixed with humus